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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,996	07/16/2003	Asela J. Gunawardana	M61.12-0502	8845

7590 05/18/2005

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EXAMINER	
SIEK, VUTHE	
ART UNIT	**PAPER NUMBER**
2825	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,996	GUNAWARDANA, ASELA J.	
	Examiner	Art Unit	
	Vuthe Siek	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,20,21 and 23-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18,20,21 and 23-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application 0/620,996 and amendment filed on 2/28/2005, Claims 18-26 remain pending in the application.

Claim Objections

2. Claim 18 are objected to because of the following informalities: step of "changing the structure..." needed clarification, since one does not know as the what the change of the structure will be, thus making the claim vague or is not clearly defined; step of "inserting a label on a node", is not clearly define, since one does not know what label going to be inserted, on which node; "adding a label from a node...", which node is referred to. Each of claimed limitation must be clearly defined in order avoid any misinterpretation of the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 18, 20, 21 and 23-26 are rejected under 35 U.S.C. 103(a) as being anticipated by Yemini et al. (US 2002/0163889).

5. As to claim 18, Yemini et al. teach a network structure (finite state machine structure) comprising nodes and links to interconnect between nodes (summary). The nodes and links are labeled [at least in 0033, 0035, 0067, 0071]. Yemini et al. teach removing labels or deleting (a label from a node) in the network structure [0046, 0070]; changing the structure to form an optimized finite state machine or network structure [0037, 0059, 0044, 0045, 0067-0076, 0091]; placing the label in a node of the optimized finite state machine and inserting labels in the nodes (dynamic labeling, re-labeling of network structure, propagating labels or pass label from node to another [0036-0037, 0044-0046, 0067-0076]. In addition, Yemini et al. teach node and link labels of a network structure. Yemeni et al. teach his present invention is accomplishes label assignment for a given node, X according to the following node path labeling algorithm. Examples are given in [0067, 0069, 0035-0038]. All nodes neighboring X pass their labels to X pre-pended by the link label connecting them, provided that the label does not already begin with that link label. For example, node H would pass its node label 2 to node G, pre-pended by the link label that it passes it's node label along (i.e., the link labeled 1). This results in node G being assigned a node label of "12". In another example, node H could merely pass it's node label 2 to node G, and node G could then pre-pending the label with the link label 1. These teachings would have anticipated the claimed limitations of appending the label to end of the label for the link if the link is an incoming link to the node and appending the label to beginning of the label for the link if the link is an outgoing link to the node or adding the label from the node to the labels of each link that connects to the node because by appending the node label to the link

label, this would allow each node to pass its label to another node through that link label. Yemini et al. do not explicitly teach separating the labels of the node and the link by a separator. But, Yemini et al. suggest using a separator such as "comma" to separate node labels in order to provide path routing (Fig. 3-7, [0082]). This suggestion would have rendered the claimed limitation obvious to one of ordinary skill in the art at the time the invention was made of using or inserting a separator between labels of the node and the link when adding the node label to the link label in order to provide node-path labeling relationship in order to maintain tracking or routing path and optimize the structure to thereby providing optimal searching.

6. As to claims 20-21, Yemini et al. teach node and link labels of a network structure. Yemeni et al. teach his present invention is accomplishes label assignment for a given node, X according to the following node path labeling algorithm. Examples are given in [0067, 0069, 0035-0038]. All nodes neighboring X pass their labels to X pre-pended by the link label connecting them, provided that the label does not already begin with that link label. For example, node H would pass its node label 2 to node G, pre-pended by the link label that it passes it's node label along (i.e., the link labeled 1). This results in node G being assigned a node label of "12". In another example, node H could merely pass it's node label 2 to node G, and node G could then pre-pending the label with the link label 1. These teachings would have anticipated the claimed limitations of appending the label to end of the label for the link if the link is an incoming link to the node and appending the label to beginning of the label for the link if the link is an outgoing link to the node or adding the label from the node to the labels of each link

that connects to the node because by appending the node label to the link label, this would allow each node to pass its label to another node through that link label.

7. As to claim 23, Yemini et al. teach removing or deleting the labels from each node in the network structure [0046, 0070, 0074, 0075].

8. As to claims 24-26, Yemini et al. removing the labels (removing a suffix of the label, prefix of the label) and storing the removed label in the node [0035-0037, 0065-0075]. Yemini et al. teach an example of removing a suffix [0074-0075]. Since Yemini et al. teach a node maintains a list of all labels its neighbors have sent to it. For each entry from a neighbor, a node may create a new label for itself, by pre-pending the received label to the beginning of the entry. Each label obtained in such manner may interpreted as a path to the root node. Thus this would suggest there are a relationship between node labels and link labels in order to maintain tracking or routing path (prefix and suffix).

Remarks

9. The indication of allowable subject manner of Claim 27 has been withdrawn, due to suggestion of the prior art and known subject manner. Therefore, all claims have been rejected and should not be allowed over the cited references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vuthe Siek whose telephone number is (571) 272-1906. The examiner can normally be reached on Increase Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vuthe Siek

VUTHE SIEK
PRIMARY EXAMINER